CASSIANO DAL POZZO'S DRAWINGS OF CITRUS FRUITS*

David Freedberg

To claim that Giovanni Battista Ferrari's *Hesperides*, published in Rome in 1646,[1] is one of the greatest and most compendious citrological treatises ever written may not, these days, arouse more than passing attention. But no one who has looked at more than a few of its 115 plates can doubt that he is in the presence of an artistic achievement of the highest order and a taxonomic document of extraordinary interest. That it is also a heroic example of book production will be apparent to anyone who has had even the slightest acquaintance with the problems of typography, layout and book design in general – to say nothing of the complications of marshalling the resources of not one but many distinguished artists.

The text itself, consisting of more than 400 folio-sized pages, is a stupendous compilation of every possible aspect of the lore and science of citrus fruit. It is full of unexpected delights, from recipes for sherbert – provided to the author by none other than Cassiano dal Pozzo and Pietro della Valle – to formulae for cosmetics and cures for a range of illnesses. But while this kind of information is perhaps more or less exactly what one might expect from a work that in some respects follows closely on the heels of the great herbals and botanical treatises, it would be quite wrong to see the book simply in terms of the old tradition of herbals (especially those by Dodonaeus and Clusius, often mentioned by Ferrari) and the occasional publication, such as those by Calcagnino and Pontanus, on citrus fruit. It is much more. It is, as one would expect from a man who played so prominent a role in the planning, design, and organisation of the Barberini gardens, a thoroughgoing horticultural treatise. There is advice about irrigation, manuring and every aspect of the cultivation and use of citrus trees, and there are first hand assessments of the effectiveness of the Aldobrandini, Farnese and Lante orangeries and the delightful pergola of Cardinal Pio. It tells of the inventions of Belgian gardeners, and of the latest usages from the Riviera to Florence and Sicily; it records the devices of other distinguished gardeners, such as the still unfortunately elusive Tranquillo Romauli, and it gives detailed instructions about the most up-to-date garden and arboricultural implements. As one would expect, furthermore, from a man who held the chair of Hebrew at the Jesuit College in Rome, it throws unexpected sidelights on semitic (and oriental) lore about oranges and lemons – even including a discussion of how the Jews of Italy pro-

* Much of the material about Giovanni Battista Ferrari and Cassiano dal Pozzo in this article is based on my "From Hebrew and Gardens to Oranges and Lemons: Giovanni Battista Ferrari and Cassiano dal Pozzo," in *Cassiano Atti 1987*. The interested reader will find a much expanded range of references and documentation there, as well as appropriate acknowledgment of my indebtedness to Francesco Solinas, Anna Nicolò and Ugo Baldini for their help in my researches.

[1] Here referred to as Ferrari.

cured the *Ethrogim* they needed on the Feast of Tabernacles. Everywhere Ferrari reveals his interest in languages and etymology. The book itself is written in the most skilful and elegant Latin, as one could imagine from someone whose rhetorical and poetic skills are evident in the earliest of his poems and orations – to say nothing of the beauty of his newly discovered letters to Cassiano in the vernacular.[2] He had at his fingertips a vast range of classical and mythological material, all of which he brought to bear on citrus fruits in the most interesting and ingenious of syncretistic, ethnographic and aetiological ways. That Ferrari moved in the orbits of the most distinguished Roman artists of his time is apparent not only from the fact that they designed the allegorical plates in the book, but also in the one-, two- or three-page eulogies concerning eight of them. All but one of these eulogies have been neglected by art historians until now.[3]

Finally, as one would expect from a man who had produced a Syriac dictionary twenty-four years earlier[4] and who then turned to horticulture and botany and was evidently in close contact with several of the early Lincei – the link, as we shall see, was provided by Cassiano, though Ferrari was also personally acquainted with the distinguished German doctor and botanist Johannes Faber – the book as a whole is a hugely conscientious and apparently untiring effort at a complete taxonomy and classification of citrus fruit. Indeed, it was this aspect of the book, as well as its evident art historical interest, that first attracted my attention. No one with even the slightest interest in the history of taxonomy and classification before Linnaeus can afford to neglect Ferrari's *Hesperides*. The principles of taxonomy and classification here merit much further serious investigation. On the face of it these principles may seem to depend chiefly – and rather haphazardly – on the unusual and sometimes bizarre outer appearance of the fruits described, and on a whole gamut of inner and external deformations. The book is a brave attempt to classify the entire citrological world, with the chief divisions being oranges, lemons, and *mala citrea*. But it would be completely wrong to claim that the book is "une [*sic*] poème assez pédant sur la botanique, ou plus exactement sur les maladies des plantes," as Anthony Blunt once did, in one of the few modern scholarly references to the work.[5] It would also be seriously incomplete to seek to understand the classifications of the *Hesperides*, even with their emphasis on the idiosyncratic, the strange, and the diseased, as simply an outgrowth – as it were – of the interest in collecting strange and exotic specimens for natural history collections and *Kunst-* and *Wunderkammer*. The temptation to see it in this context – especially in the light of what is increasingly being learned about Cassiano's own natural historical collections – is great; but it should be strongly resisted.

Much more than Ferrari's *Flora* of 1633 – a popular and thrice reedited book[6] – the *Hesperides* does not merely reveal the ways of horticulture in the circle of the Barberini family, notably Cardinal Francesco. It also speaks volumes about the ways of science in the years following the founding of the Lincei by Federico Cesi in 1603 and the great discoveries of

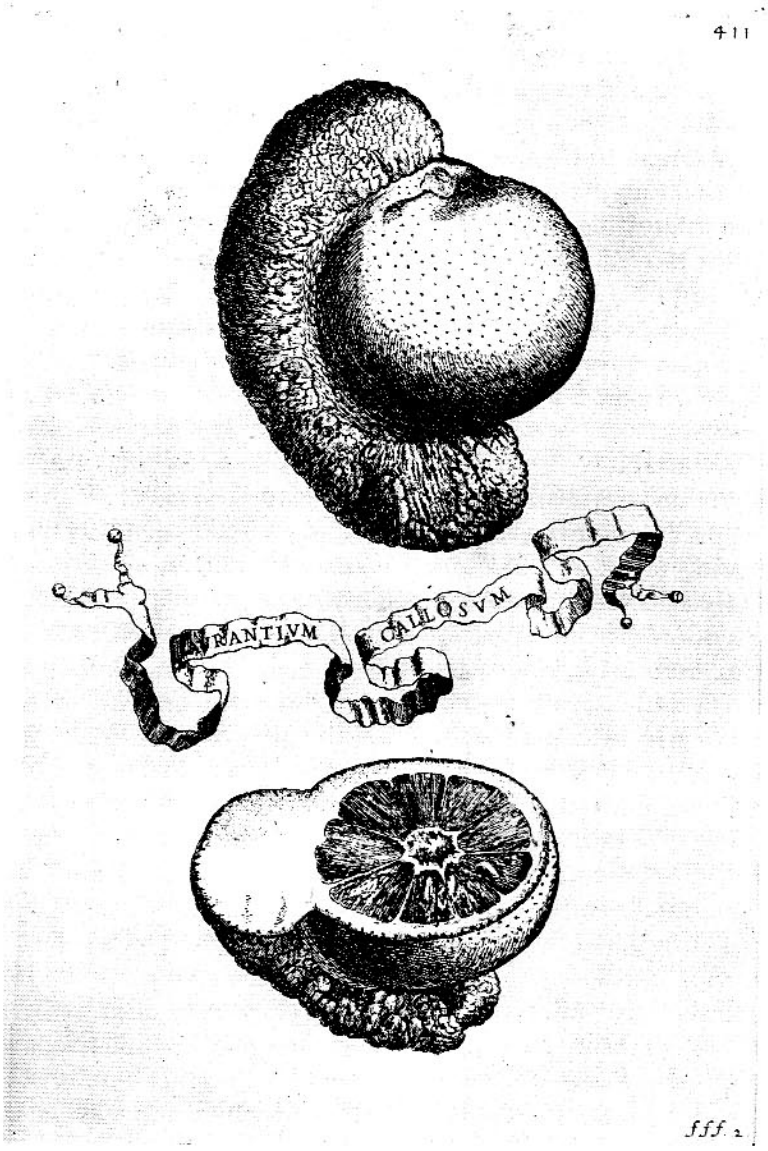
[2] For references to the biographical sources, and a description of the unpublished material, see Freedberg (1987).

[3] The published eulogy is that of Poussin; see J. Thuillier, "Pour un 'Corpus Pussinianum'", in [Colloque] *Nicolas Poussin*, ed. A. Chastel, Paris, 1960, pp. 77-8, reproducing (and briefly commenting on) *Hesperides*, p. 99. Cf. also n. 17 below, for the way in which Ferrari conceived of these eulogies.

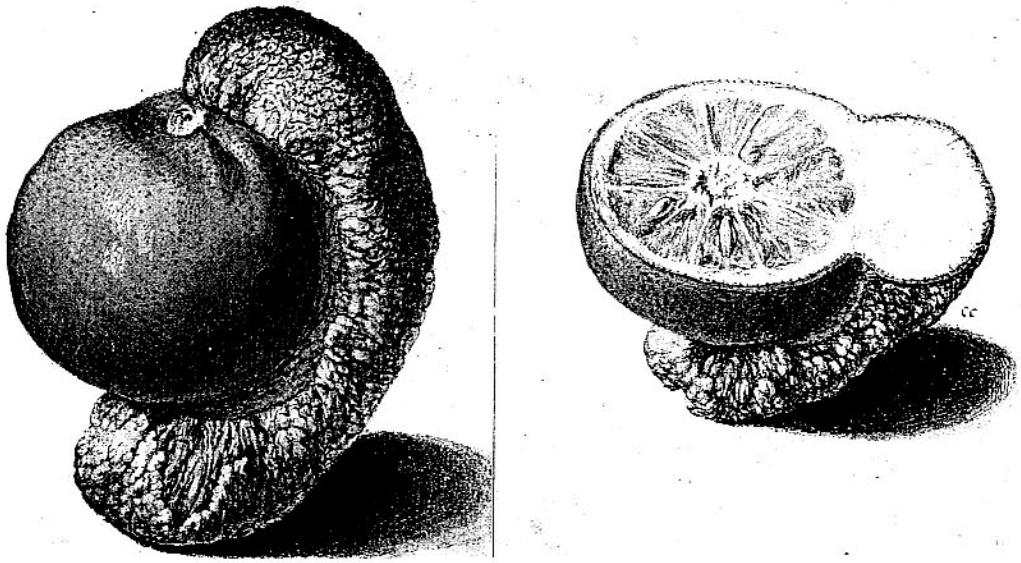
[4] See n. 10 below.

[5] Nicolas Poussin, *Lettres et propos sur l'art*, ed. A. Blunt, Paris, 1964, p. 52, n. 22.

[6] I.B. Ferrari, *De Florum Cultura Libri IV*, Rome (Stephanus Paulinus), 1633; G.B. Ferrari, *Flora ovvero Cultura dei fiori... E trasportata dalla lingua Latina nell'Italiana da Lodovico Aureli Perugino*, Rome (Pier Antonio Faciotti), 1638; *Flora seu De Florum Cultura Libri IV. Editio Nova. Accurante Bernhard Rottendorfio*, Amsterdam (Ioannes Ianssen), 1646 and 1664.



10. *Aurantium callosum.* Etching (Ferrari, p. 411).



11. *Aurantium callosum*. Watercolour and bodycolour over black chalk. 129 x 129 mm and 129 x 129 mm (RL 19329 and 19330).

Galileo. Indeed, it even antedates by a few years the publication of the culminating work of many years of Lincei activity, the famous *Tesoro Messicano* – to which the first part of Cesi's own conspectus of all botanical knowledge, the *Phytosophicae Tabulae*, was attached.[7]

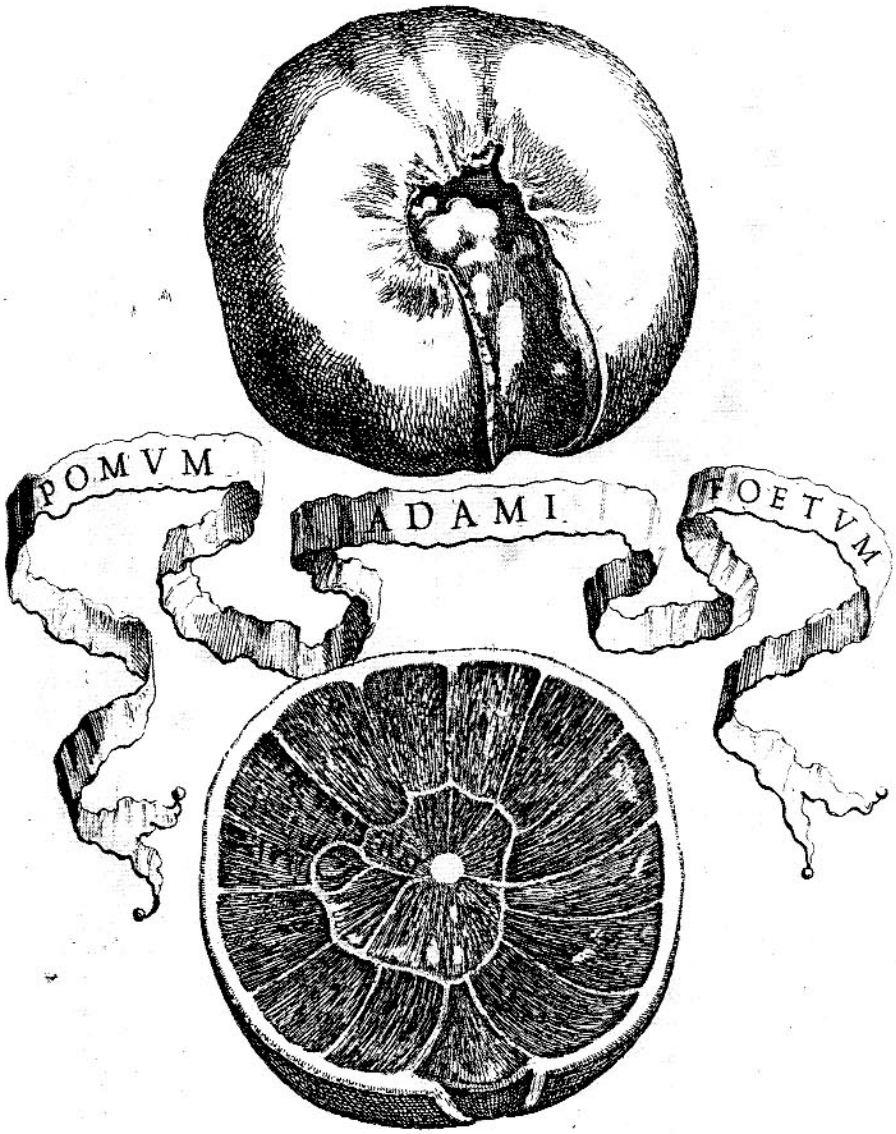
If it seems hard to account for the comparative neglect into which the *Hesperides* – and its author – has fallen, then the neglect of the associated visual material is both easier and more difficult to understand. Before considering these problems, however, let us look a little more closely at the life of a Jesuit father whose career – even in those times, when Jesuit careers could take many strange turns – developed in ways that one might not, once again, entirely have predicted. He was born in Siena in 1582 and was thus Cassiano's senior by six years.[8] At the age of 19, in April 1602, he entered the Jesuit College in Rome. In addition to taking the usual courses he also studied Syriac at the Maronite College under Petrus Metoscita and his colleagues. The early progress reports at the Collegio Romano are complimentary about his literary and Hebraic talents, but rather critical of what appears to have been his somewhat frail state of health and melancholy character.[9] In any event, he soon took over the professorship of Hebrew and in 1622 published a Syriac dictionary, which does not however seem to have left a great mark on the

[7] Francisco Hernandez et al., *Rerum medicarum Novae Hispaniae Thesaurus, seu plantarum animalium mineralium mexicanorum historia ex Francisci Hernandez... relationibus... a Nardo Antonio Recchо... Collecta ac in ordinem digesta a Ioanne Terrentio Lynceo... Notis Illustrata*, Rome (Vitalis Mascardi), 1651, here referred to as *Tesoro Messicano*. Included in this huge mine of information was the first part of Cesi's own project for a total Natural History, the *Phytosophicae Tabulae Ex Frontispiciis Naturalis Theatri Principis Federici Caesii Lyncei...* (on pp. 901-952).

[8] For the published material, see the inevitable entry in the *Biographie Universelle* (XIII, p. 614), and the scattered locations in De Backer-Sommervogel (II, cols. 1390-1391, s.v. "Conti, Sébastien"; Supplément Rivière, fasc. V, col. 1061; IX, Supplément Casalicchio-Zweisig, cols. 331-2), should also be consulted; but none of these are complete. For the unpublished material (and verification of his variously-given birthdate), see my article cited in the headnote above.

[9] The reports, preserved in the Archives of the Society of Jesus in Rome and drawn to my attention by Ugo Baldini, are more fully discussed in the article cited in the headnote above.

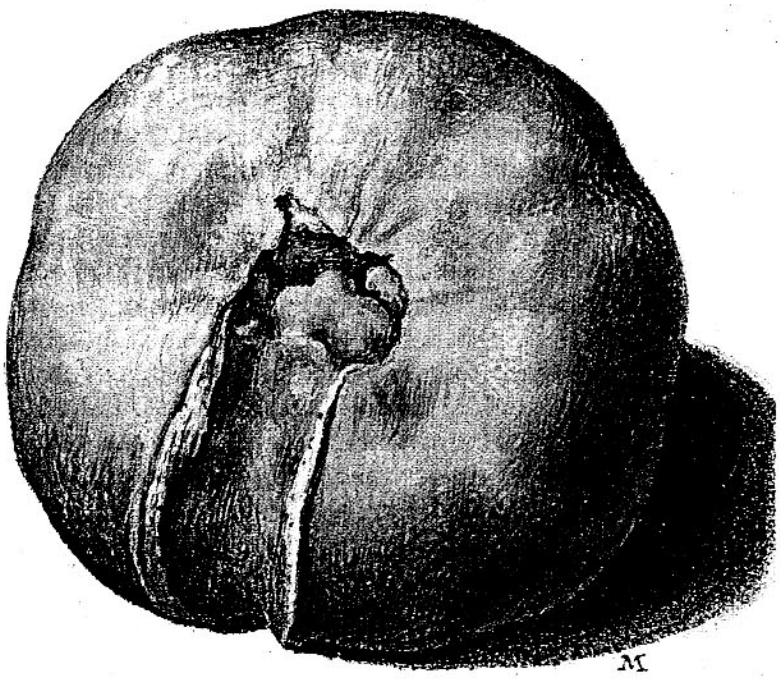
315

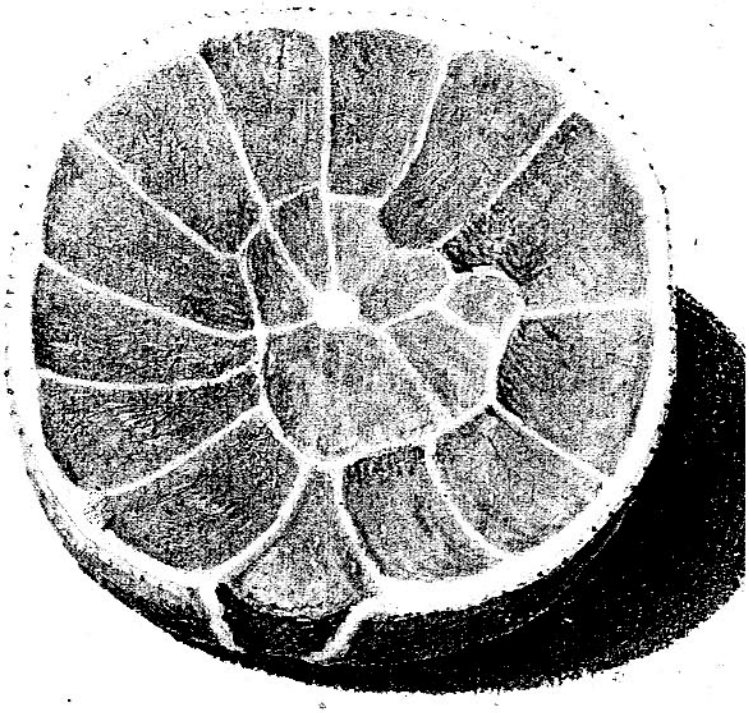


Rr 2

12. *Pomum Adami foetum.* Etching (Ferrari, p. 315).

13. *Pomum Adami foetum.* Watercolour and bodycolour. 109 x 122 mm (RL 19328).
14. Section of *Pomum Adami foetum.* Watercolour and bodycolour. 108 x 122 mm (RL 19327).





study of Semitic languages.[10] But within a few years two of the chief interests of his life – horticulture and botany – had become absolutely clear.

Already in the first edition of his *Orationes*, which appeared in 1625,[11] there is plenty of evidence of an active interest in gardening and natural history (and much punning, as always about both Orsini and Barberini attributes). Perhaps not so much gardening in general, but plants and flowers in particular. Ferrari cannot resist bringing in floral metaphors at every stage in his discourse, but there is one notable *oratio*, in which he makes brief reference to the gardens of Rome and Florence, from the Villa Farnese to the Villa Medici, from the orange gardens of Scipione Borghese, to those of the Villa Ludovisi, the Villa Matthei and many others, including those of the slightly lesser nobility, such as those of the Esquiline triumvirate of Domenico Fedini, Pompeo Pasqualini and Pompeo di Angelis. In each case it is clear that Ferrari's real love is flowers.

Indeed the marvellous *De Florum Cultura*, which first appeared (with the financial assistance of Francesco Barberini) in 1633, and was translated into Italian in 1638, is the one work by Ferrari that has received the attention of scholars.[12] There is no need, therefore, to dwell on it here, except to emphasize that it is in this work that Ferrari develops the literary-scientific approach that was to reach full expression in the *Hesperides*. On several occasions Ferrari makes it clear that he was very aware that too detailed a discussion of the flowers, and a pure diet of botanical illustration would tire the reader; and so he announces that he will follow the principle of mixing the *utile* with the *dulce*. He will lighten the scientific burden by interspersing the serious horticultural and botanical discussions with rather long stories which he made up himself. Each of these was illustrated by a plate designed by a famous Roman artist.[13] The stories are all related in some gen-

[10] *Nomenclator Syriacus*, Rome (Apud Stephanum Paulinum), 1622. According to the *Biographie Universelle*, XIII, p. 614, "Bochart faisait peu de cas de cet ouvrage et accuse l'auteur de ne point connaître le syriaque, ce qui l'a conduit à mal traduire les mots syriaques...". I have not yet been able to trace the reference to a particular passage in Bochart's all too dense and voluminous *Opera Omnia*.

[11] *Orationes XXV*, Lyon (Sumptibus Ludovici Prost, heredis Rouille 1625), with a frontispiece by F. Greuter after Domenichino. Later editions include ones in Rome (Francesco Corbelletti), 1627; Rome (Typis Petri Antonij Facciotti), 1635, with a frontispiece by F. Cimi after Romanelli and three new orations; Venice (Apud Baleonium), 1644; Cologne (Apud Cornelium ab Egmont), 1650, with a frontispiece by P. Troschel after Romanelli (reversed); London (Ex officina Rogeri Danielis), 1657; and London (Ex officina Ioannis Redmayne), 1668. On the frontispieces see B. Kerber, "Ergänzungen su Romanelli", *Giessener Beiträge zur Kunstgeschichte*, 6, 1983, pp. 34-5 and nn. 11-14, with Fig. 2 showing the frontispiece by F. Cimi after Romanelli to the fourth edition of Rome, 1635. I have not been able to discover anything about the edition that, according to the *Biographie Universelle*, XIII, p. 614, appeared in Milan in 1627 with nine new orations. The London editions both have seven *Pleiades* ("orationes varii argumenti") appended to them; their frontispieces are also copies of the Romanelli design.

[12] For the editions of this work, see n. 6 above. For some instances of Francesco Barberini's subsidies, see, for example, O. Pollak, *Die Kunsttätigkeit unter Urban VIII*, Vienna and Augsburg, 1928-31, I, p. 338, as well as M.A. Lavin, *Seventeenth Century Barberini Documents and Inventories of Art*, New York, 1977, pp. 12, 15, 20; Documents 98, 121 and 160 and 219. See also the *Flora* of 1633, p. 11 for Ferrari's own gratitude for the patronage of Francesco. The horticultural importance of the *Flora* has been noted in the characteristically useful and engaging pages in G. Masson, *Italian Gardens*, London, 1961, pp. 182-5; as well as by S. Coggiatti, "Giardinaggio a Roma nel '600", *Strenna dei Romanisti*, Rome (Società Romana di Storia Patria), 1978, pp. 96-101. The most substantial modern study, however, is that by Isa Belli Barsali, "Una fonte per i giardini del Seicento: Il Trattato di Giovan Battista Ferrari", in *Il Giardino Storico Italiano* (Atti del Convegno di Studi, Siena-San Quirico d'Orcia, 1978), ed. G. Ragionieri, Florence, 1981, pp. 221-34. In preparing the article on Ferrari and Cassiano cited in the headnote above, I unaccountably omitted references to the extremely important studies by Lucia Tongiorgi Tomasi on sixteenth- and seventeenth-century horticulture and botany. Articles such as her "Projects for Botanical and Other Gardens: a 16th Century Manual", *Journal of Garden History*, III, 1983, pp. 1-34, and "Francesco Mingucci 'Giardiniere' e Pittore Naturalista: Un aspetto della Committenza Barberiniana nella Roma Seicentesca", in *Cesi Atti 1985*, pp. 277-306, all cast considerable light on Ferrari, the traditions from which he emerged, and – most significantly – his immediate horticultural and botanical contexts.

[13] For his exposition of this principle in the *Hesperides*, see n. 16 below.

eral way to gardening and botanical themes, or to the Barberini family. They either account for the origins of particular plants, or illustrate an aspect of gardening (such as the change of the lazy gardener Limax into a snail, and the flower thief Brucas into a caterpillar, illustrated by Sacchi). The relevance of the allegorical plates demonstrating the origins of floral diversity to Poussin's two great pictures of the late 20s and early 30s – the *Triumph of Flora* in the Louvre, and *The Realm of Flora* in Dresden – is a topic I hope to examine at a later stage. The stories were illustrated by the best Roman artists: Pietro da Cortona did the title-page and four other pages, Guido Reni showed the seeds of Indian plants being handed to Neptune who would transport them to the *Horti Barberini*, while in some of the Italian impressions one finds a rather splendid *festa* of the Gods by Lanfranco. The engravings are chiefly by Greuter (to whom payments are recorded in the Barberini accounts), but they are by others too, such as Claude Mellan (who engraved one of Cortona's designs). It is, in short, a book that is most suavely written and spectacularly illustrated.

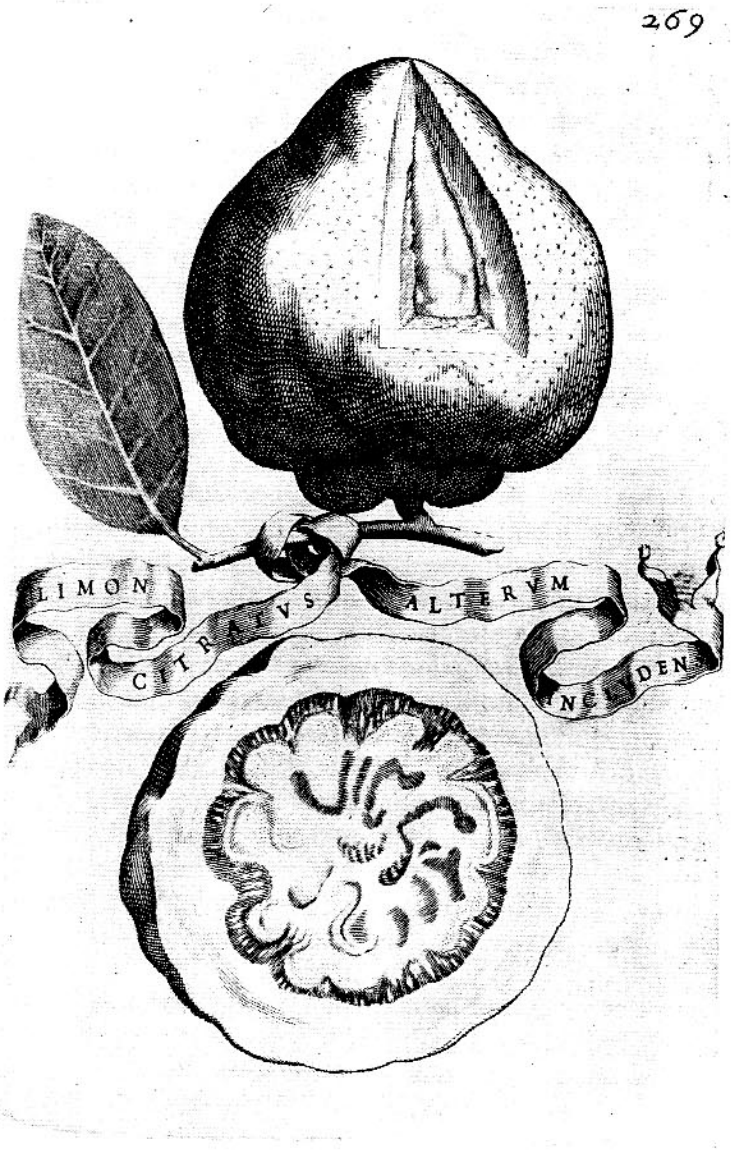
For more than a decade after the first publication of the *Flora*, Ferrari worked on the *Hesperides*, not only researching the classical sources, but collecting ever-increasing quantities of information, and – above all – looking for a means of subsidizing and publishing this ever more ambitious project. By the time that it finally appeared, in 1646, Ferrari's health had declined. Soon afterwards he retreated to the Jesuit College in Tivoli, before finally retiring to his beloved Siena in 1650.[14] It was there, two years later, that he published his completely – but unjustifiably – overlooked *Collocutiones*, with its splendid material on Jewish ethnography, and on Jesuit theatrical and cultural life.[15] It also happens to provide much evidence of his close and affectionate relationship with Cassiano. There are constant references to Cassiano, to his library, and to the information he provided. Like the *Orationes*, which continued to be reprinted – even after his death, even in places like London – the *Collocutiones* reveal Ferrari not only as the devout Jesuit he was, but also as a man whose love of gardening and botany never waned, and whose interest in Hebrew hardly slackened. But analysis of these works must await another occasion.

The *Collocutiones* were not quite the last production of Ferrari (who died in 1655 aged 73), since he was to contribute substantially to a volume edited by the *Intronati* on famous Sienese religious figures, written under the name by which he was known to his fellow academicians, *L'Ameno*, the pleasant one.[16] The name fitted the man, since he is

[14] For the date and for references to his declining health, see the relevant passages from the Jesuit archives and from Ferrari's own letters to Cassiano quoted by me in the article cited in the headnote above.

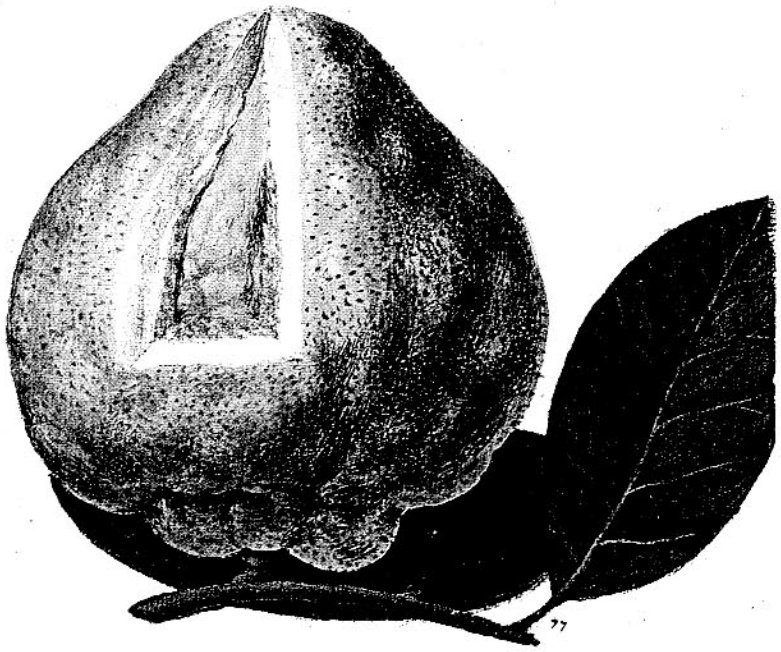
[15] Ioannes Baptista Ferrari, *Collocutiones*, Siena (Apud Bonettos. Typis Publicis), 1652.

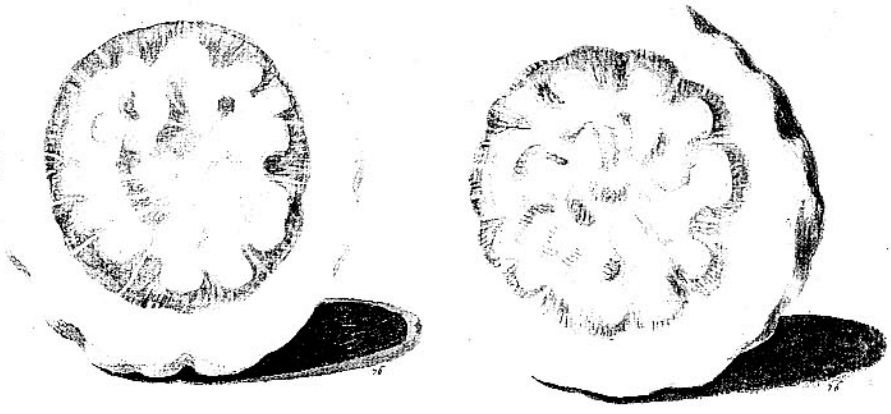
[16] *Fasti Senenses ab Academia Intronatorum Editi*, s.l. et s.d. See De Backer-Sommervogel, II, col. 1391, for a discussion of the possibility of Siena as the place of publication and 1659 as the date. Cf. the *Fasti Senenses Altera editio auctior*, Siena (Apud Bonettum. Typis Publicis), 1669 (De Backer-Sommervogel, II, cols. 1390-1391, s.v. "Conti, Sébastien"). In the introduction to the reader of the first edition, the book is referred to as "opus aliquorum ex nostro coetu industria et labore perfectum"; but in the second edition the reference is much more specific. Here the book is said to be "magna ex parte elaboratum ab academico *L'Ameno* [i.e. Ferrari]... ad hunc quem vides terminum accurate perduxit academicus *Il Composto* [i.e. Sebastiano Conti]". Thus the letters "A" and "C", in the second edition, indicate who wrote which article. There is a useful manuscript summary of the collaboration beside the first page (**2 verso) of the *Index Nominum* in the copy of the first edition in the British Museum. It not only identifies Ferrari as "L'Ameno" and Conti as "Il Composto", it also identifies Ferrari as the author of the 80 articles in the book. Furthermore, it seems likely to me that the title page of this edition, engraved by Guillaume Valet after a design by Maratta, was conceived by Ferrari – at any rate on the basis of its similarity with the title page of the 1652 *Collocutiones* and several of the other scattered allegorical conceits by Ferrari.

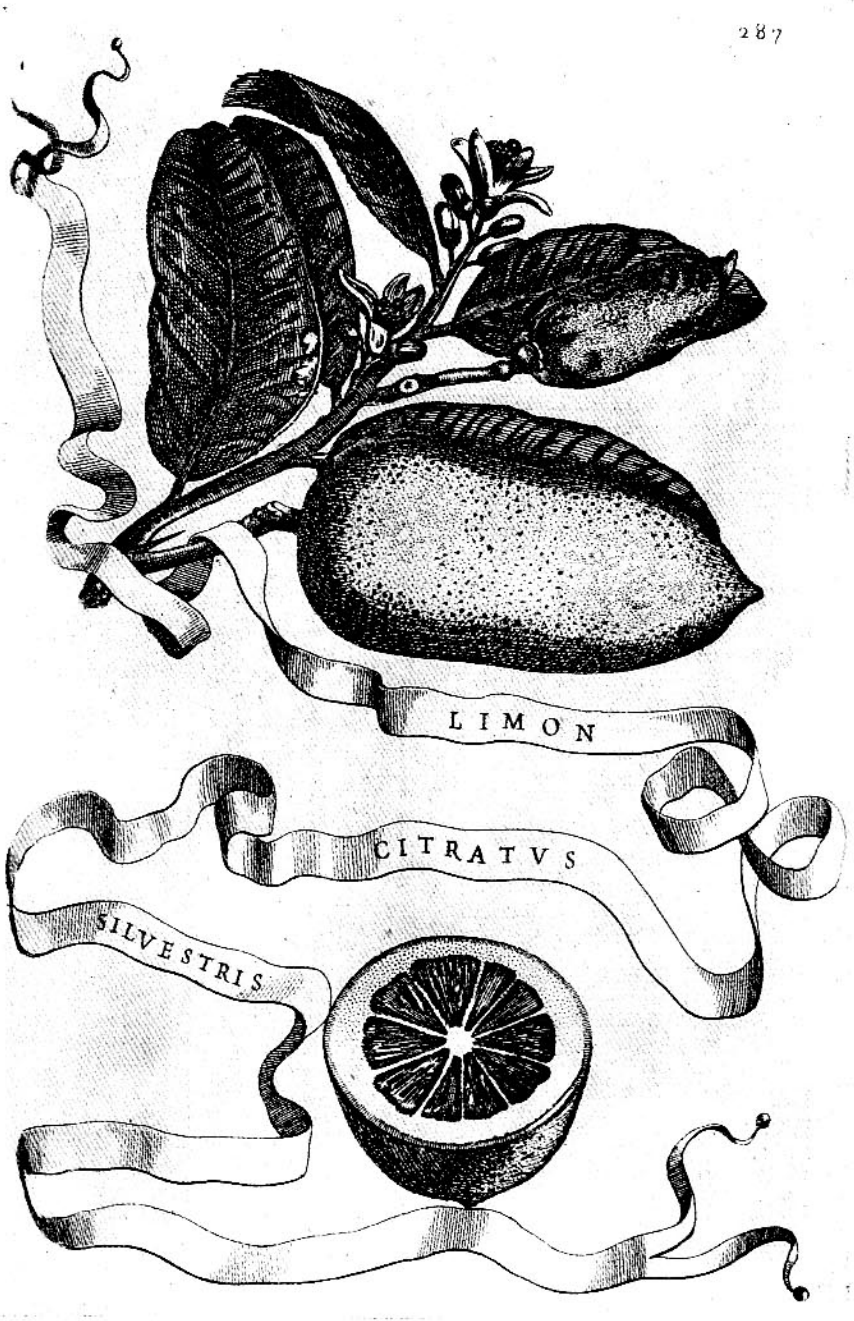


15. One *Limon citratus* within another. Etching (Ferrari, p. 269).

16. One *Limon citratus* within another. Watercolour and bodycolour with gum arabic. 186 x 205 mm (RL 19363).
17. Section of one *Limon citratus* within another. Watercolour and bodycolour. 185 x 288 mm (RL 19362).

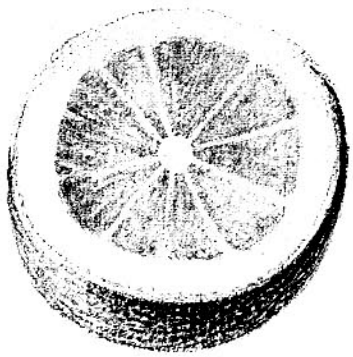






18. *Limon citratus silvestris.* Etching (Ferrari, p. 287).

19. *Limon citratus silvestris.* Watercolour and bodycolour with gum arabic over black chalk. 258 x 173 mm (RL 19372).



one of the most benign writers I know (I refer, of course, to his style in Latin). The tone, in all his writings, is consistently charming and relaxed. Altogether characteristic of his style is the multiplication of diminutives, and nowhere more so than in the *Hesperides* of 1646.

In its general structure the *Hesperides* followed similar principles of organization to that of the *Flora* – although the latter was a less ambitious work, both scientifically and bibliographically. In the *Hesperides*, the scientific and ethnographic material was made more palatable by the winsome and psychologically revealing stories Ferrari invented, as a literary means of accounting for the origins of certain kinds of citrus fruit, especially the oddly digitated ones to which he repeatedly draws attention. Even though the stories are all indebted, in a general way, to Ovid's *Metamorphoses*, they are entirely original. They too were illustrated by designs by the most famous Roman artists of the day: Pietro da Cortona, Poussin, Albani, Sacchi, Romanelli, Reni, Domenichino and Lanfranco.[17] Francesco Ubaldini and François Perrier did drawings of antique statues of Hercules, while Filippo Gagliardi contributed several very splendid architectural designs, for proposed and actual garden buildings. On all of these Ferrari has interesting and illuminating things to say.

It is perhaps not surprising that scholars should already have noted or gone in search of the preliminary drawings for the *allegorical* plates: after all, the latter are by well-known and distinguished artists. (Most but not all of the drawings have now been traced.) These are also the prints that prompted John Evelyn's enthusiastic appraisal of Cornelis Bloemaert in the Englishman's *Sculptura* of 1662:

> "now that we mention [Abraham] Blomaert... There is at Rome a cousin of his named Cornelius, who in that St Francis after Guido Reni, and those other pieces after the designs of those great masters Monsieur Poussine, Pietro Cortone &c to be seen in the books set forth by the Jesuit Ferrarius, his Hesperides, Flora, Aedes Barberini etc. hath given ample testimony how great his abilities are; for certainly he has in some of these stamps arrived to the utmost perfection of the *Bolino*..."

But the one hundred engravings of citrus fruits had been entirely neglected. No one went in search of the drawings for them – presumably because of the now old-fashioned view that drawings of natural history do not really qualify as works of art. Yet the citrological plates in the *Hesperides* are of great scientific and cultural interest; and their status as works of considerable aesthetic distinction is immediately apparent to anyone who looks at them. In them one may see how Ferrari studied and classified the actual objects of his research. There are plates showing fruits that are in sections, with many cut up to reveal malformations of skin and cortex (cf. Figs. 10, 12 and 15). Leaves – and even seeds – are reproduced where they are of visual or taxonomic relevance (cf. Figs. 18 and 20); and so too are membranous deformations. Here are cancerous fruit, tuberous ones, double and multiple specimens, finger-shaped ones and so on and so forth, all evidently playing an

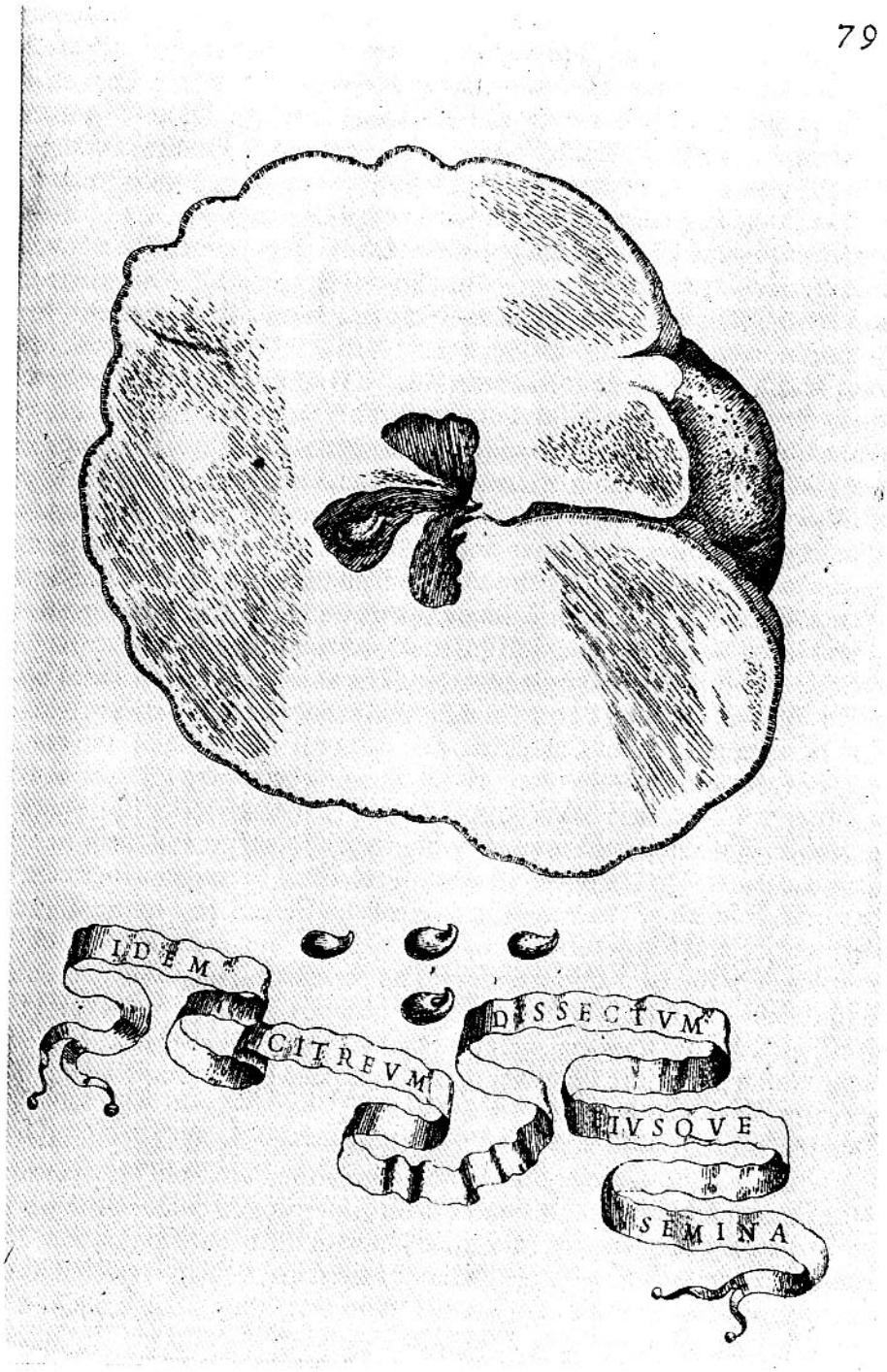
[17] For a full statement of his general rationale in providing the work with these allegorical plates by the very best artists, see the interesting, florid, and utterly characteristic passage in the third chapter entitled *Pictura Ornatrix* of the first book of the *Hesperides*, p. 4: "Sed ut quaesitis undique ornamentis illustre dignumque aureis malis opus, nempe aureum Ferrarius extunderem: quos oratione depinxi auriferae silvae partus, auxiliaris artificio picturae describendos curavi. Ad ejusdem silvae umbram & iucundam & salubrem detinere *saepius lectorem placet fabulis, rei seriae subservientibus. Hae quan* [sic] *vis ruditer a me narratae, praestantissimis tamen a pictoribus graphice descriptae ita in conspectum veniunt: ut ipsi testes simul ac iudices oculi fictum a facto non secernant.* Quare post fabulae cuiusque linearem picturam pictoris ego gratam commendationem, ex ipso picturae argumento natam, subjiciam: quemadmodum initio praestare caepi..." (my italics).

important role in the issues of classification and taxonomy discussed in the text. A few details, especially of seeds, testify to yet further instances of the early use of the microscope. Each image is elegantly placed on the large folios, whether on its own or in relation to another; and a banderole or scroll conveying the relevant nomenclature twists in a graceful manner around the fruit. The printmakers involved in the production of the plates in the *Hesperides* were not only Cornelis Bloemaert, but also Domenique Barrière, Camillo Cungi and Claude Goyrand, and it is likely that at least some of the citrological work was divided among them too. On every level, therefore, the botanical prints of Ferrari's *Hesperides* merited further study; but where were the drawings for them? Although I have briefly mentioned Cassiano dal Pozzo on a few occasions, by now the reader of this note will perhaps be wondering about the closer relevance of Giovanni Battista Ferrari and his *Hesperides* to this introductory number of the *Quaderni Puteani*. Elsewhere I will give an account of and publish the extraordinary manuscript volume, of over 130 pages, in the library of the Accademia Nazionale dei Lincei in Rome. This document – really a collection of reports, summaries, drafts and notes – makes it clear that it was none other than Cassiano himself who collected the bulk of the first-hand citrological material from gardeners, noblemen and even ships' captains all over Italy and which he then passed on to Ferrari. Letters about citrus fruit came from the Padri Cappuccini of Naples, from Alessandro Caetani in Sicily, from Cattaneo Cataneo on the Genoese Riviera, from the Riccardi gardens in Florence, from the Bishop of Treviso about the oranges of the North Italian Lakes, and so on. The same volume provides us with the very detailed contract between Ferrari and his publisher Herman Scheus. It gives ample proof, if proof were needed, of Cassiano's role not only in setting up the contract, but also in engaging the artists for the allegorical plates and arranging for the necessary subventions, either from his own pocket or from that of Francesco Barberini. Naturally Cassiano was also responsible for arranging payments to Bloemaert and the other engravers of the citrological plates in the book, based on a selection of the drawings which he and Ferrari had been collecting. The beautiful letters from Ferrari, also in the Accademia dei Lincei, corroborate and further substantiate Cassiano's role, especially in this work and the *Flora* but also in the later *Collocutiones*. The correspondence between Poussin and Cassiano (published in 1911) also demonstrates how strenuously, in 1641 and 1642, Cassiano campaigned for the financial support of Louis XIII (it never came; indeed it is unclear whether the applications were ever passed on to him by Poussin's acquaintance, the king's secretary Sublet de Noyers).[18]

The most tantalizing question that arises, exactly as in the case of G.P. Olina's *Uccelliera* of 1622,[19] is why Cassiano's role in the compilation of the book is so little credited in the final publication. Indeed, Cassiano's name is only mentioned twice in the whole of the *Hesperides* – once, not surprisingly, in connection with the tribute to Poussin, and on the other occasion in connection with his recipe for sherbert, a recipe rejected in favour of the better one provided by Pietro della Valle (who had, after all, just been in Turkey). The question is rich with implication for our understanding of scientific studies – and the relation between scientific and antiquarian researches – in Barberini Rome; but it

[18] See, for example, P. Jouanny, "Correspondance de Poussin", *Archives de l'art français*, nouv. pér. v, 1911, letters on pp. 110-66.

[19] Here referred to as Olina. On Cassiano's role see now the extremely important discussion in Solinas & Nicolò (1988), especially pp. lxviii-lxix, and Henrietta McBurney's note below, pp. 34-47.



20. Section of *Malum citreum* with its seeds. Etching (Ferrari, p. 79).

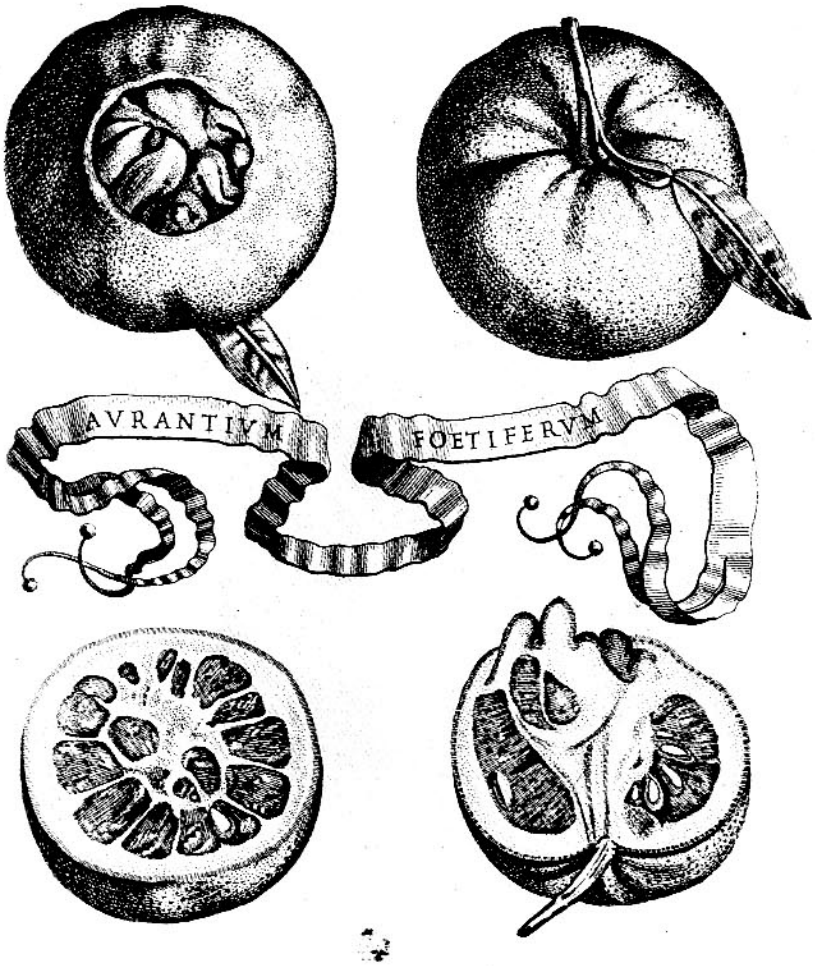
21. Section of *Malum citreum* with its seeds. Watercolour and bodycolour. 200 x 231 mm (RL 19347).

cannot yet fully be answered. It is, of course, also the very same question that seems to be posed by the surviving drawings, in Windsor Castle, in the library of the Institut de France in Paris, in the British Museum and elsewhere, that appear to come from Cassiano's famous "paper museum", the *Museo Cartaceo.*

At the time I asked myself the question about the possible location of the preparatory drawings for the citrons, the oranges, the early tangerines, and the lemons in the *Hesperides*, I was unaware of the material that had entered the library of Accademia Nazionale dei Lincei between 1973 and 1976 (subsequently kindly brought to my attention by Francesco Solinas), and could hardly have guessed at the importance of Cassiano's role in the production of the *Hesperides.* Although the indefatigable Gabrieli drew attention to the drawings of Cassiano's *Erbario Miniato* in the Royal Library at Windsor in 1929[20] and Bromehead published an article on his books of fossils and gems – all acquired from the estate of Federico Cesi – in 1947,[21] no one seemed to have paid any attention to Cassiano's natural historical drawings there – or at least they had not published information on

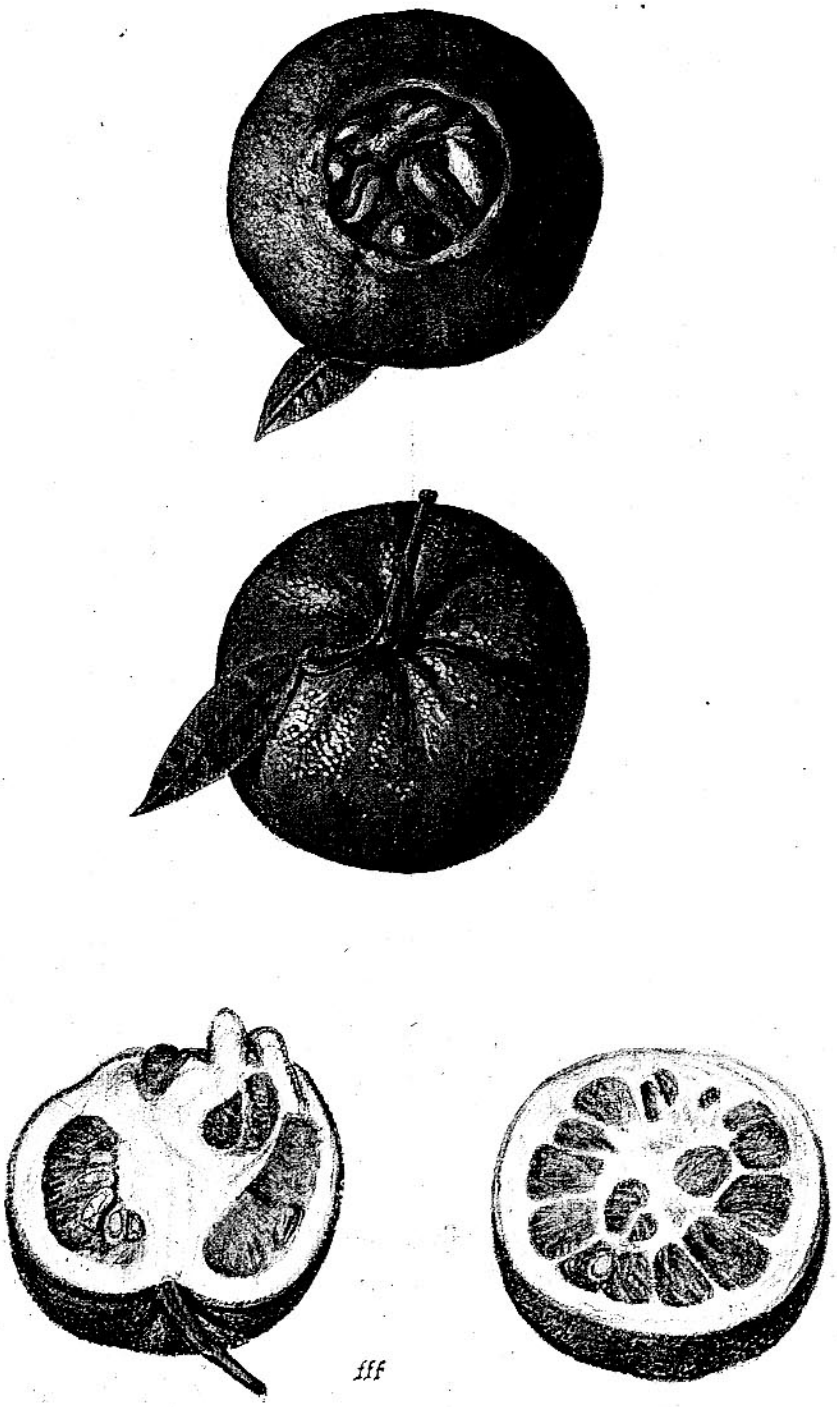
[20] Gabrieli (1929), pp. 531-4.

[21] Bromehead (1947a and b). A thorough account of the sale of drawings by Federico Cesi's widow to Cassiano in 1633 is given in Nicolò & Solinas (1985).



22. *Aurantium foetiferum.* Etching (Ferrari, p. 405).

23. *Aurantium foetiferum.* Watercolour and bodycolour with gum arabic over black chalk, 320 x 202 mm (RL 21146).


fff

them. Francesco Solinas and Anna Nicolò had just begun working on the four volumes on fossils made in preparation for the work by Francesco Stelluti and Federico Cesi known as the *Trattato del Legno Fossile*,[22] when it occurred to me that the drawings for the citrus fruits in *Hesperides* might also be in Royal Library. And so it happened: rather more spectacularly and rather more complicatedly than I had imagined.

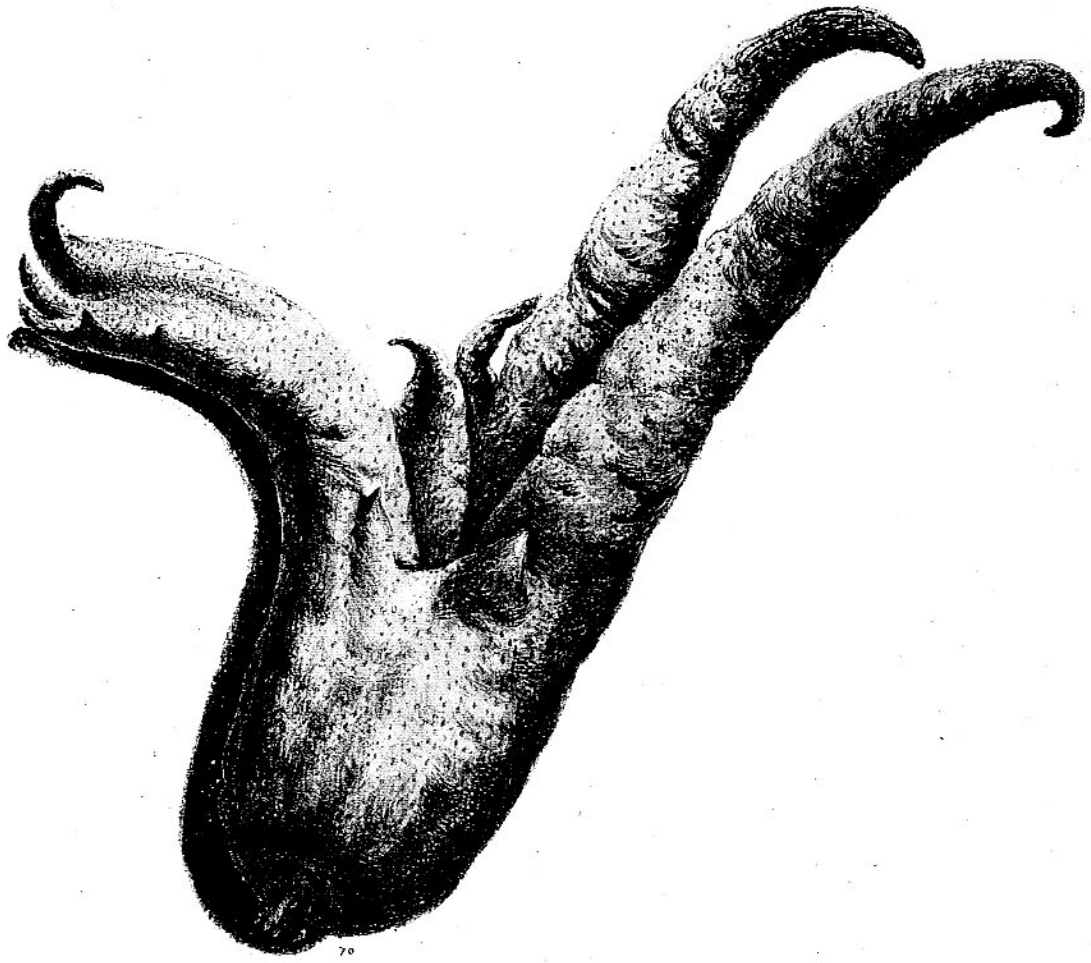
The drawings that turned out to be related to the *Hesperides* were found along with a large number of other natural historical drawings, most but not all of them mounted on sheets with the characteristic brown wash borders associated with the Cassiano drawings that George III acquired from the Albani family in 1762. There were oranges, lemons and other citrus fruits; but also many drawings of plants, some of animals, one or two of strange fetuses, several of fungi and truffles, a beautiful one of a melon and an exceptionally striking drawing of a dark green broccoli head.

Some of the non-citrus drawings are discussed and illustrated elsewhere in this *Quaderno*; all will receive full attention in the eventual catalogue. Here we should briefly discuss the citrus drawings. They are striking for several reasons, and they pose a number of problems, some of which arise in the case of the other drawings as well. I had gone in search of drawings for the botanical plates in the *Hesperides*, but when I found them they were not, as one might have expected, in black chalk or pen and ink; they were in extraordinary combinations of watercolour and gouache (see Figs. 11, 13, 14, 16, 17, 19, 21, 23, 24). Very few of them are incised for transfer. They are clearly not by one but by several artists. At least one of these artists was a watercolourist of great ability; the others were patently inferior. In fact, the drawings by the weakest hand are rather coarse and clumsy.

The 43 citrus drawings are no longer bound, as are, for example, the plant drawings in the volume known (and labelled) as the *Erbario Miniato* (which never left Windsor, except to be studied by Gabrieli in 1928). Sometimes a pair of drawings is united together on the same George III mount (e.g. Fig. 11). By no means all the drawings were used for the plates in the *Hesperides*. Sometimes, it is true, a sheet is exactly reproduced (e.g. Figs. 18 and 19); there are also instances where the placement of fruit and leaves on a single drawn sheet is altered in the relevant folio in the book, presumably for aesthetic reasons (e.g. Figs. 22 and 23). On still other occasions the fruit on several separate sheets are combined on a single page in the book; and so on. A significant proportion of the Windsor drawings is of digitated fruit – usually lemons, but all with very curious finger-like extrusions and outgrowths (e.g. Fig. 24). Although the text of the *Hesperides* makes it clear just how interested Ferrari was in these types in general, their proportion in relation to those of other citrus fruits is not reflected amongst the engravings in the book. The proportion is much greater amongst the surviving drawings. Some of the drawings carry numbers and letters. None of these seem to be related to the pagination of the final book. Might they then provide a key to the way in which they were bound in one or more volumes in Cassiano's library? Do they reflect the ways in which they were collected and assembled? Or could some of the numbers and letters even be references to other works – as in the case of one of the groups of numbers in the *Erbario Miniato* referring to one of Pietro Andrea Mattioli's commentaries on Dioscorides? The task of reconstruction, in the case of these and the other natural historical drawings, is immense.

In the first place, an effort will have to be made to correlate, where possible, the refer-

[22] Here referred to as Stelluti.



24. Digitated lemon. Watercolour and bodycolour with gum arabic over black chalk. 247 x 254 mm (RL 19358).

ences in the *Agrumi* manuscript with the surviving drawings. There are also references to the dispatch and receipt of drawings of citrus fruit – or information about them – in the still largely unpublished correspondence of Cassiano, as well as in other places such as the letters of his famous antiquarian friend Nicolas Claude Fabri de Peiresc. (In addition to other natural historical material, Peiresc was constantly sending Cassiano specimens from his own gardens in Belgentier and elsewhere.) Even if it proves impossible to establish direct connections between specific plant drawings and specific manuscript references, the aim will be to cast some light on the problem of the authorship of a number of these drawings. In the *Hesperides* Ferrari identifies the nebulous Vincenzo Leonardi as the (an?) artist responsible for the drawings for the prints in the *Hesperides*; but Francesco Solinas and Anna Nicolò have recently suggested Domenico Bonavena as another

probable artist.[23] More names are likely to come to light. With the documentary evidence taken more fully into account it might be possible to make some progress on the other questions posed by the surviving drawings themselves: on what basis, for example, were drawings chosen or rejected for use and reproduction in the *Hesperides*? To what other uses were they put? Clearly, as the manuscript evidence indicates, they were sent from a variety of places; but at what stage if ever were they bound into a volume or volumes? And how would they thus have been bound? What is the significance of the numbers and letters on the drawings? How frequently were sheets cut up and recombined, and at what stage – in Cassiano's lifetime or later? What is their relation to the other natural history drawings and what light do the citrus drawings cast on the ways in which the others were used and collected? These are just some of the questions that the cataloguing project hopes to address.

At the same time the net will be cast wider in the hope of reclaiming as many as possible of Cassiano's original holdings of citrus drawings. Aside from the sixteen sheets that appeared in the Boone sale, information about the whereabouts of other drawings is arriving in a steady trickle. More works continue to appear on the art market, while others are emerging from private collections. But strong caution will have to be exercised. Some of the sheets seem very different indeed from those that form the bulk of the material Cassiano collected for Ferrari. One example is provided by the unusually large sheet, in uncharacteristic hues, that appeared as lot 156 in the Boone sale; and the six sheets of citrus fruit bound into one of the *Plantae et Flores* manuscripts in the Institut de France, along with many pages of drawings of flowers, grasses, trees and fruits, seem, on first inspection, to be by still another hand (or hands) than those bought by George III.

For all these unanswered questions, however, the interest of the rediscovered citrus drawings is abundantly clear. They provide one of the best documented examples of the close collaboration between Cassiano and another scholar. They provide crucial evidence for the methods of natural historical study in Barberini Rome, in the years immediately following the initial researches of the early Lincei. Many of them were used for one of the most spectacular citrological treatises ever written. This book, the *Hesperides*, is not only the culmination of many centuries of both scientific and poetical compilations about oranges and lemons, from classical times onwards – and right through the Renaissance. It also incorporates a stunning set of plates the influence of which over the next two hundred years – at least – was immense. Adaptations of the plates are found in the spectacular productions – to take only two examples – of Commelin in Amsterdam in 1676[24] and Volckamer in Nuremberg in the first decade of the next century.[25] But above all Cassiano's drawings of citrus fruits and flowers form part of a much larger group of natural historical drawings that, as a whole, represents a central but inexplicably neglected chapter in the history of science and art.

[23] For Leonardi see Ferrari, p. 69 and Freedberg (1987); for Benavena see Solinas & Nicolò (1988), p. lxxviii, and their earlier essay (Nicolò & Solinas (1987)), in which they give a complete account of the development of the *Museo Cartaceo* and the stages in Cassiano's engagement of an increasingly wide circle of artists to work for him.

[24] J. Commelin, *Nederlantze Hesperides, dat is Oeffening en gebruik van de limoen- en oranje-boomen; Gestelt na den aardt, en climaat der Nederlanden*, Amsterdam (M. Doornik), 1676. See too the remarkable though much less ambitious and unillustrated translation of this work called *The Belgick, or Netherlandish Hesperides... made English by G.V.N.*, which appeared in London (J. Holford), in 1683.

[25] J.C. Volckamer, *Hesperidum Norimbergensium, sive de Malorum Citreorum Limonum Aurantiorumque Cultura et Usu Libri III...*, Nuremberg (heirs of J.A. Endter), s.d. (1713). Also published as the *Nürnbergische Hesperides*, Nuremberg, Frankfurt and Leipzig (heirs of J.A. Endter), 1708-14.